<Files\\Al-Masri 2019> - § 3 references coded [2,97% Coverage]

Reference 1 - 0,50% Coverage

At the education level, educators have been becoming increasingly motivated to adopt such platforms into classrooms.

Reference 2 - 0,99% Coverage

As we rely more on computing devices to perform our daily activities, it becomes crucial to integrate new technologies into curriculum design for enhancing the students' learning process and making classrooms more experiential.

Reference 3 - 1,48% Coverage

Using hardware prototyping tools in classrooms shows high student engagement rates, increases the students' motivation in course material, creates an exciting atmosphere in the classroom and enhances the students' overall learning experience. More importantly, open-source hardware platforms can effectively make classrooms more experiential.

<Files\\Carratala-Saenz 2019> - § 1 reference coded [0,39% Coverage]

Reference 1 - 0,39% Coverage

We considered that building a cluster from scratch by assembling the hardware, and configuring the software to ensure the proper functioning, was the best way to experience HPC.

<Files\\Hallak 2019> - § 2 references coded [0,45% Coverage]

Reference 1 - 0,13% Coverage

The Raspberry Pi single board computer offers a new
way for teaching Computer Science

Reference 2 - 0,32% Coverage

Raspberry Pi increased their
interest
projects in Computer Science labs enhances overall students experience,
in Computer Science
major, encouraged them to complete the assignments, and improved their grades.

<Files\\Kawash 2016> - § 3 references coded [0,52% Coverage]

Reference 1 - 0,13% Coverage

novice assembly language programmers often find the process of programming in it tiresome and frustrating

Reference 2 - 0,26% Coverage

to make the process of learning assembly language more enjoyable for the students, while offering them exposure to a contemporary architecture (similar to what they may encounter in today's ubiquitous mobile devices).

Reference 3 - 0,13% Coverage

the novelty of the device entails that there are only a few studies that analyse these experiences in depth.

<Files\\Kawash 2016-1> - § 1 reference coded [0,49% Coverage]

Reference 1 - 0,49% Coverage

Teaching assembly language programming at the undergraduate level is often challenging, and this can often be attributed to the perceptions (of the students) that the topic is dull and tedious.

<Files\\Krupp2019> - § 2 references coded [1,21% Coverage]

Reference 1 - 1,00% Coverage

Conceptually, we found that students could be better served with a redesign of the course that focused on the following goals: • Learning Through Experimentation: We wanted to remove lecturing as much as possible from the course and have students learn by doing.
• Building Community: We wanted to focus on students learning how to work together in groups, learn about different computing organizations on campus, and learn about different research groups.
• Understanding Different Majors: We wanted students to understand the different majors we offer and get exposure to topics in each major.
• Understanding the Impact of Computing: We wanted students to understand the different ways that computing has benefited our society and realize new issues that have surfaced due to its pervasiveness.

Reference 2 - 0,22% Coverage

They reiterated that, in a CS0 course, motivation is imperative and that students may tend to focus too much on the final grade rather than acquisition of knowledge or skill.

<Files\\matthews2018> - § 4 references coded [1,53% Coverage]

Reference 1 - 0,68% Coverage

Prior to 2006, parallel & distributed computing (PDC) topics
were rarely covered in the computer science (CS) curriculum, let alone at the undergraduate level. The expense of parallel hardware (among other reasons) made PDC challenging to teach. This has largely changed over the last decade, due to the advent of multicore and manycore (GPU) architectures and the emergence of cloud computing. These innovations have greatly decreased the cost and increased the access to parallel architectures.

Reference 2 - 0,21% Coverage

It follows that students who create software need to be educated in the concepts and techniques required to write efficient software for multicore systems.

Reference 3 - 0,35% Coverage

the Raspberry Pi can be effectively used to introduce undergraduate students to parallel computing in a workshop setting. SBCs embody the “hands-on experiential” learning advocated by CS educators, and are a fun way to introduce students to parallel computing.

Reference 4 - 0,29% Coverage

Our collective experiences strongly suggest that the Raspberry Pi
is an inexpensive, accessible, cost-effective, and highly motivating way to introduce undergraduate students to parallel and distributed computing.

<Files\\Phang2017> - § 2 references coded [1,73% Coverage]

Reference 1 - 1,16% Coverage

The teaching of assembly language is a challenging task at universities as students
might find that the assembly programming is a confusing and difficult process [1]. One of the reasons that demotivate students is they learn the underlying design of the microprocessor architecture based on their imagination in lecture class [2]

Reference 2 - 0,57% Coverage

Hence, laboratory session plays an important role to help students gaining practical hands-on skill of microprocessor architecture and usage of assembly language.

<Files\\slamnik-krijestorac2019> - § 6 references coded [2,03% Coverage]

Reference 1 - 0,43% Coverage

As stated by Crocker et al. [3], despite the changes of practical content and equipment over
time, teaching methods
have largely remained the same. It means that teachers usually deliver lectures with demonstrations; students emulate a teacher’s example in small groups, analyzing and discussing the results.

Reference 2 - 0,30% Coverage

Crocker et al. [3] emphasize the importance of moving away from such a demonstration-related approach to the significantly larger involvement of students throughout the learning process, enhancing autonomous learning.

Reference 3 - 0,57% Coverage

Hence, the
benefits of our approach are the following: • Providing valuable insight
into students’
learning experience, their observations, and obstacles during the system’s implementation
• Creating a powerful tool for further improvement of the laboratory
• Encouraging teachers to embrace similar practice by presenting a way to adopt this approach in teaching, regardless of the type of education field

Reference 4 - 0,20% Coverage

Hence, the huge effort in setting up the RPi-based DS can potentially result in students' comfortability with future work in such an environment.

Reference 5 - 0,26% Coverage

•Having programming as the most influential factor to the project realization is somewhat strictly related to the course matter, while being familiar with the RPi environment is not mandatory.

Reference 6 - 0,26% Coverage

•Our approach provides a research community with a clearcut set of perspectives that enable observing the usage of RPi devices as a replacement for traditional heterogeneous laboratory setup.

<Files\\vasilchenko2017> - § 2 references coded [0,39% Coverage]

Reference 1 - 0,14% Coverage

Yet there are gaps in understanding media literacy as both a research area and as an educational concept [17].

Reference 2 - 0,26% Coverage

This perspective resonates with pedagogical theory, and particularly Constructionism, which theorises that the best learning happens through application of the knowledge in the form of learning artefact creation

<Files\\wachira2017> - § 2 references coded [0,87% Coverage]

Reference 1 - 0,40% Coverage

With rapid advances in the emerging and pervasive
field of the Internet of Things, electrical and electronic engineering students need a robust grasp of embedded computational device principles to make a proper, appreciable and relevant contribution.

Reference 2 - 0,47% Coverage

This was evidenced by the high increase in perceived student programming ability and project completion rates when working in triumvirates. The success of the triumvirate model is attributed to the utilisation of all five principal learning modalities and a group-centric learning environment.

<Files\\wamaina2016> - § 4 references coded [2,07% Coverage]

Reference 1 - 0,38% Coverage

Despite this fact, engineering education in Africa is not well funded [2] leading to a small number of engineers per capita in Africa compared to developed economies [3].

Reference 2 - 0,48% Coverage

Engineering departments must compete for scarce education funding and it is therefore

important for the various engineering disciplines to device low cost laboratories which can be used to train future engineers.

Reference 3 - 0,82% Coverage

An additional benefit of this revolution in electronics is that a number of microcontrollers and microprocessors are now within the reach of students and hobbyists. This has led to an effort to use these devices within the electrical engineering curriculum so as to improve the quality of laboratory exercises performed by students particularly in developing countries.

Reference 4 - 0,40% Coverage

In this paper we have presented low cost laboratory exercises based on the Raspberry Pi microprocessor aimed at improving electrical engineering education in developing countries.

<Files\\Wilkinson2017> - § 7 references coded [2,90% Coverage]

Reference 1 - 0,29% Coverage

Procedural thinking, as developed by Papert [12] and [13] in the study of LOGO, is considered to be beneficially developed through allowing students
time to manipulate and experiment with digital
technology.

Reference 2 - 1,00% Coverage

They hardware, found it their programs which difficult to fellow trainees of other are also commonly found in use in schools. The next insurmountable barrier experienced by the trainees was attaining a suitable collaborator.
communicate subjects
convincingly enough to strike up collaboration. So, although they had thought of a number of projects to suit different crosscurricular needs, they couldn't actually convince anyone to join them. After a number of announcements made on their behalf via the virtual learning environment and still no takers, a suitable physicist trainee was recruited for them, who it was noticed, had a particular flair for using digital technology in their own micro-lesson practise.

Reference 3 - 0,44% Coverage

Raspberry Pi and the coding systems Scratch and Python are generally regarded as being accessible programming tools that children can use with little if any requirement for face to face instruction. Therefore, should be expected that CS graduates should be able familiarise themselves with the equipment quite readily

Reference 4 - 0,27% Coverage

However, more worrying was
that they claimed that the
semantics of the coding was more crucial than the more sophisticated programming languages that they had studied as part of their degrees.

Reference 5 - 0,31% Coverage

The initial fright of being set the task caused panic and confusion, which fits Dewey's [20] definition of a problem perfectly and although the trainees were able to reinterpret their goals, it took coaching for them to do so.

Reference 6 - 0,29% Coverage

indicated in the brief references to soft to PS is skill
However, as literature, the
techniques required for PS are not easily tied down and to some extent the ability
experiential and
epistemological

Reference 7 - 0,29% Coverage

This may or may not have been developed in the trainee's degree course; however, the evidence here shows that they needed coaching through the process and required human support to overcome their initial shock.

<Files\\younis2019> - § 5 references coded [1,00% Coverage]

Reference 1 - 0,20% Coverage

Recent research findings [3] have
not been shown
teaching parallelism using single-board computers (SBCs) such as the Raspberry Pi as a uniform work environment is effective.

Reference 2 - 0,15% Coverage

Beyond the technical skills required to be part of a
computer science curriculum, it is critical to develop professional soft skills

Reference 3 - 0,16% Coverage

Research findings
[4] show that
senior engineering students are not often aware of soft skills, or ways to use them through conflict resolution.

Reference 4 - 0,39% Coverage

These results are especially important as Computer Science
programs prepare prepared (particularly graduates for
contemporary workplaces. If students do not value Project Based Learning opportunities, it is likely that they are not adequately
in terms of team
orientation) to successfully negotiate with others in their professional positions

Reference 5 - 0,10% Coverage

We have observed that the module emphasis on the
Teamwork skills needed to be improved.